
**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of:)
)
Modernizing the E-rate) WC Docket No. 13-184
Program for Schools and Libraries)

**COMMENTS BY THE SOUTH CAROLINA K-12 SCHOOL TECHNOLOGY INITIATIVE
RELATED TO THE E-RATE NOTICE OF PROPOSED RULEMAKING
Comment Date: September 16, 2013**

Introduction

The South Carolina K-12 School Technology Initiative submits the following comments in response to the Federal Communications Commission’s (FCC) Notice of Proposed Rulemaking to support the modernization of the E-rate Program for Schools and Libraries.

The South Carolina K-12 School Technology Initiative was established by the State Legislature through a Proviso in 1996. This initiative was undertaken based on the vision of expanding educational technology across all public schools statewide. It embodies a proactive approach by the General Assembly to address challenges related to technology infrastructure, connectivity and education in schools throughout the state. In 1997, this initiative first received state funding to support technology implementation for public school districts. As a result of this funding, the state’s public K-12 Schools Network was created. When the Federal E-rate program was established, South Carolina took the opportunity to increment funding to further benefit the education system through access to a variety of legacy and emerging technologies. The first funding commitment provided by the E-rate program in 1998 proved transformational for education technology in public schools and libraries across South Carolina. The public library systems were added to the state public K-12 Schools Network. This marked a major milestone in preparing the state’s K-12 students and teachers for the for 21st Century technologies. The state was recognized nationally as being one of the first to provide Internet and network connectivity to all of its K-12 schools and public libraries. Today the support provided by the E-rate program is being utilized by the state’s K-12 School Technology Initiative to acquire and manage broadband services to public libraries and public schools. The support provided by the E-rate Program, by the state General Assembly and through innovative Public/Private Partnerships, enables South Carolina’s public schools and libraries to offer access to high-quality, media-rich, interactive educational information resources. The provision of these resources, supported by a robust WAN/LAN backbone and broadband Internet connectivity, is a major element in addressing the digital divide and discontinuities in “brick and mortar” educational resources based on geographical and socio-economic factors.

The South Carolina K-12 School Technology Initiative commends and supports the Commission's continued efforts to modernize the vital E-rate program. The comments reflected in this document focus on eight areas relevant to the E-rate Notice of Proposed Rulemaking:

- E-rate Funding Cap
- Bandwidth Availability
- Funding Priorities
- Consortium Purchasing
- Bulk Buying
- Program Streamlining
- Children's Internet Protection Act
- Document Retention Requirements

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I. ENSURING SCHOOLS AND LIBRARIES HAVE AFFORDABLE ACCESS TO 21st CENTURY BROADBAND THAT SUPPORTS DIGITAL LEARNING

1. E-rate Funding Cap (§§9-10)

The accelerating evolution of technology constantly drives the need for schools and libraries to secure more network capacity and Internet connectivity. The continued deployment of critical new educational technologies will be endangered if crucial funding is not made available. The initial steps taken to improve the E-rate program under the National Broadband Plan¹ provided essential support for expanding broadband services across the nation. The current approach implemented by the Commission, which raises the annual funding cap to include an inflation-adjusted increase each funding year has been effective in partially off-setting the substantial shortfall between available funding and demand (§10). However, as seen in the FY 2013, the amount in E-rate funding requested by schools and libraries exceeded the “annual cap of \$2.25 billion”² by more than double the available funding for this year (§9). Additional recurring funding is needed to remedy this situation. The unavailability of funding for the Priority-2 Services category directly diminishes the capability of schools and libraries to implement the required infrastructure for 21st Century technology even when funding for Priority-1 Services category is available.

¹ Federal Communications Commission, Connecting America: The National Broadband Plan, (National Broadband Plan), available at <http://www.broadband.gov/download-plan> (last visited July 15, 2013); Schools and Libraries Universal Service Support Mechanism, A National Broadband Plan for our Future, CC Docket No. 02-6, GN Docket No. 09-51, Order, 25 FCC Rcd 18762 (2010) (Schools and Libraries Sixth Report and Order).

² See Letter from Mel Blackwell, Vice President, USAC, to Julie Veatch, Chief, Wireline Competition Bureau (April 22, 2013), available at http://www.usac.org/_res/documents/sl/pdf/tools/news/FY2013-Demand-Estimate.pdf (last visited July 15, 2013) (2013 USAC Demand Letter).

2. *Bandwidth Availability (§§17-30)*

21st Century learning environments require affordable high-capacity broadband connections. Establishing high capacity broadband connections should be the highest priority of the E-rate program. The use of more interactive digital learning resources, mobile computing initiatives, online standardized testing, real-time student data repositories and other efforts to advance educational and communication technologies are vital to the social and economic development of all communities. Funding provided by the program is used by the state consortium to provide Internet access to 81 public schools districts and 42 public library systems, as well as WAN network services to 977 schools and 177 library branches. Our data supports the conclusion that schools need at least 100 Mbps of Internet access as proposed in both President Obama's ConnectED³ initiative and the State Education Technology Directors Association (SETDA) Broadband Imperative⁴. Each of these proposals recommends increasing broadband Internet access to support a variety of learning environments in K-12 schools. One of the concerns to which each proposal offers recommended solutions is the challenge of broadband accessibility to support a variety of learning environments within schools. The South Carolina K-12 School Technology Initiative is convinced that the ubiquitous availability broadband Internet connectivity to support modern instructional technology must be a national priority. The Commission questions whether the SETDA target 100 Mbps/1,000 users Internet connectivity, increasing to 1 Gbps/1,000 users, and of school district-level Wide Area Access (WAN) connectivity at the minimum of 10 Gbps/1,000 users by 2017-18 should be adopted (§§22,23). The SETDA proposal should be utilized as a starting point in estimating needed connectivity availability by the 2017-18 school year. We feel that these proposed targets should be adopted from an available service perspective and not as a mandatory requirement imposed upon schools. Nationally, these targets may not be equally applicable to all states over the next five years. It is very important that the E-rate program provide ample funding for broadband services to schools and that this resource be utilized efficiently to avoid over-allocation resulting in wasted funds. For example, a caching server inside a network often represents a cost-effective alternative to additional bandwidth. We propose that the Commission consider adding such products to its eligible services listing.

Overall, we feel that the Commission should allow applicants to continue to decide what affordable, sufficient bandwidth is realistically needed for their public schools and libraries (§25). This includes additional bandwidth needed to support the adoption of internal wireless networks capable of enabling "one-to-one" (one computing device per student) initiatives in schools (§27).

³ See The White House, Office of the Press Secretary, *ConnectED: President Obama's plan for Connecting All Schools to the Digital Age* available at http://www.whitehouse.gov/sites/default/files/docs/connected_fact_sheet.pdf (last visited July 15, 2013) (ConnectED Fact Sheet).

⁴ *The Broadband Imperative: Recommendations to Address K-12 Education Infrastructure Needs*. Page 2. 2012. (<http://www.setda.org/web/guest/broadbandimperative>).

The Commission seeks information regarding the percentage of schools currently having 100 Mbps/1,000 users as well as the percentage of schools that are currently served by fiber connections (§24). In South Carolina, 99% of our public school districts have 100 Mbps/1,000 students bandwidth for dedicated Internet access provided via fiber-based Ethernet service. The remaining 1% of districts are small in terms of student enrollment and currently do not require 100 Mbps of connectivity, though it is an available option. The percentage of individual schools within each district which currently have fiber based WAN connectivity is 99%. Service to the remaining 1% of schools is provided via wireless towers because of the lack of available fiber options.

In regards to the Commission's inquiry as to how best to collect data on the speed and quality of school and library connections via modifications to the FCC Form 471 application, we recommend the Item 21 attachment be modified to include fields to provide "more detailed information" specific to the services for which applicants seek funding support (§30).

3. Funding Priorities (§§67-100)

Funding for Broadband Connections

Regarding the most efficient technological architecture that schools and libraries are likely to use for connectivity, fiber connections are the preferred transmission technology for delivery of high-capacity broadband service to our state's anchor institutions (§67). We were gratified to note that the Commission decided to include dark fiber service as an eligible service via the *Schools and Libraries Sixth Report and Order*.⁵ There are currently two public school districts in South Carolina that have leased lit Gigabit dark fiber service to individual school sites with partial E-rate program funding support (§70). We concur with the Commission's proposal to provide priority one support for the modulating electronics necessary to light the leased dark fiber (§71). This revision should simplify applicant funding requests for this service.

The Commission asks if it should review the 2001 CIPA Order decision in light of the schools' and libraries' current network security needs. We believe such a review should take place. Furthermore, we propose that filtering software should be made eligible for E-rate funding because it is a requirement for program compliance (§86).

Phasing Down Support for Certain Services

Non-instructional facility (NIF) buildings support both education of K-12 students and the provision of services to library patrons. Often, these locations house both administrative and educational operations. We believe that the eligibility for these facilities, regardless of whether they serve as network hubs should not change (§100).

⁵See *Schools and Libraries Sixth Report and Order*, 25 FCC Rcd at 18766-73, paras. 9-19

II. MAXIMIZING THE COST EFFECTIVENESS OF E- RATE FUNDS

1. Consortium Purchasing (§§180-182)

B. Increasing Consortium Purchasing

South Carolina currently has a state consortium that provides Internet Access and Wide Area Network (WAN) services to public schools and libraries statewide. These services are procured using state master contracts (SMCs) that have been accepted by the E-rate program. This consortium has been able to reduce the cost to acquire broadband services because of the volume of service requested. In addition to these economies of scale, participating state public schools and libraries are relieved of the financial and administrative burden of seeking funding for these essential broadband resources (§180). The state consortium has unwritten continued growth and maintenance of the South Carolina's public K-12 Schools and Library network connectivity through funding from both state budget appropriations and the Federal E-rate program. The E-rate program should prioritize consortia funding commitments (§182). Frequently, state consortia's monthly expenses for eligible services exceed the average applicant expenses. This can result in budgetary issues, since funding commitments may not be secured for more than a year. We request that the Commission consider assigning a high priority to funding all eligible services as it reviews consortium applications.

2. Bulk Buying (§§186-187)

C. Encouraging Other Types of Bulk Buying Opportunities

The current provision for utilizing state master contracts for products and services should remain an option for securing funding for eligible E-rate services (§186). Many applicants depend on these contracts to procure cost-effective products and services because they lack the financial and administrative resources needed to perform formal procurement operations. Some are limited by statute or policy to state contract procurement. One frequently documented conflict between E-rate competitive bidding requirements for requests for services (FCC Form 470) and state master contracts established through formal processes such as RFPs, deals with accommodating manufacturer- or brand-specific products or services. Historically, South Carolina's statewide contracts for E-Rate-eligible priority two services have been brand- and product-specific. We understand that the additional competitive bidding compliance requirement added by the Commission for FY 2013 prohibits applicants from including specific manufacturers' brand names, products or services in FCC Form 470 of RFPs unless the words "or equivalent" are included within the request description⁶, was intended to promote cost savings by increasing competitive opportunities for additional bidders who could offer compatible products. However, this requirement has placed an added burden on applicants seeking to utilize existing and new state master contracts that do not include this clause due to state procurement protocols. As a result, applicants must perform their own individual procurement or lose potential E-rate funding. We recommend that this requirement be waived for state-stipulated contracts. We do support the concept of the Commission creating a bulk buying program for E-rate-eligible services. Such an approach would ensure additional procurement options for applicants to acquire cost effective products and services (§187).

⁶ USAC Schools and Libraries Fall Applicant Training, 2012, Program Compliance, PP15 http://www.usac.org/_res/documents/SL/training/2012/fall-program-compliance.pdf

III. STREAMLINING THE ADMINISTRATION OF THE E-RATE PROGRAM

1. Program Streamlining (§§227-258)

Electronic filing of documents is the most efficient way to manage the application process. We support the proposal requiring all E-rate applicants and vendors to file all documents, including FCC Form 500, electronically with USAC and to require USAC to make all notifications electronically. Paper submission should only be allowed as an alternative if electronic filing is not technically feasible (§227). The suggestion of imposing a “minimal fee” for applicants who request to file via paper submission should be revisited at least one year after this electronic transition has been implemented (§228). We also support SECA’s recommendation that all forms and correspondence with USAC should be made available from a “centralized portal” allowing applicants to retrieve both current and prior E-rate funding year information (§229). Having this information readily available will decrease the instances of clerical errors when completing forms and help to maintain an accurate inventory of documents required for program record retention compliance.

The E-rate funding process associated with the review of FCC Form 471 applications by USAC needs more transparency. Applicants need more detailed information in order to correctly ascertain the status of their funding request. We concur with SECA’s proposal that USAC should provide additional levels of detail in its “Application Status” website tool (§232).

We agree with the proposed revisions to help simplify the Eligible Services List (ESL) and the FCC Form 470 document, by eliminating the regulatory categories “telecommunications services” and “Internet access”. Such changes will make it easier for applicants to focus on requesting the appropriate eligible service priority level and providing detailed information regarding the services for which they are soliciting bids from service providers (§§248-250).

In regards to recapturing unused program funds more effectively, we propose that the Commission instruct USAC to notify applicants of the intent to recapture these funds within 60 days following the invoicing deadline specified by USAC. Often, applicants do not file an FCC Form 500 to return unused funds because such a filing is not mandatory. Enhanced communication from USAC will accelerate the process of recapturing funds which the Commission may redirect for more expedient uses (§§254-258).

IV. OTHER OUTSTANDING ISSUES

Children's Internet Protection Act (§§271-275)

The Children's Internet Protection Act (CIPA) is a very important element of policy compliance required by the E-rate program for funding. It is also critical for guaranteeing the safety of both K-12 students and library patrons. The increased use of mobile devices by young individuals increments the likelihood of cyber threats to these users. We propose that the use of any device which accesses network services or resources funded by E-rate should requisitely be managed by policies and procedures compliant with CIPA (§273).

Document Retention Requirements (§295-298)

The five year document retention requirement that the Commission has in force should not change. Currently, most applicants must retain documents between 7 to 12 years or longer to comply with state and local facility document retention requirements. Adding an additional five years to the current E-rate document retention term would have relatively little positive impact on records retention and would do little to achieve the objective of streamlining the program (§296).

The South Carolina K-12 School Technology Initiative will be happy to discuss any questions the Commission may have in regards to these comments. Requests may be directed to my attention.

Respectfully Submitted by:

/s/ Jimmy Earley

Jimmy Early, Chair
South Carolina K-12 School Technology Initiative

South Carolina Division of State Information Technology
4430 Broad River Road
Columbia, South Carolina 29210
803-896-0222
JEarley@cio.sc.gov